WHAT IS CLAIMED IS

1.   A computing system comprising:

5   a first node coupled to a first communication link; and

a second node coupled to the first node via said link;

wherein the first node is configured to:

convey a plurality of data packets of a first type to the second node via the link,

each of said packets being conveyed according to a predetermined

10   schedule;

detect an inter-node communication message is available for transmission; and

insert said message within one of said data packets.

2.   The computing system of claim 1, wherein the first node is configured to insert

15   said message within one of said data packets responsive to determining the message does

not exceed a predetermined size.

3.   The computing system of claim 2, wherein in response to detecting the message

exceeds said size, the first node is configured to:

20   partition the message into a first plurality of blocks, each of said blocks being less

than or equal to said size;

encode the first plurality of blocks into a second plurality of blocks, said second

plurality being greater than said first plurality; and

insert each of the encoded blocks within a different one of said packets.

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4.   The computing system of claim 3, wherein the first node is further configured to

generate pseudo-header information corresponding to said message and convey said

pseudo-header information to said second node with said packets.

5.   The computing system of claim 4, wherein said pseudo-header information is selected from the group consisting of: a unique message identifier corresponding to said message, a message type indication, a message length indication, and a sequence number corresponding to each block.

6.   The computing system of claim 3, wherein subsequent to receiving any combination of a number of the encoded blocks equal to the first plurality, the second node is configured to reconstruct the message.

7.   The computing system of claim 6, wherein the link comprises a heartbeat network, and wherein the system further comprises a data network interconnect coupled to the first node and the second node.

8.   The computing system of claim 3, wherein the first node is configured to encode the first plurality of blocks pursuant to an erasure code algorithm.

9.   A method of inter-node communication comprising:
        conveying a plurality of data packets of a first type from a first node to a second
                node via a communication link, each of said packets being conveyed
                according to a predetermined schedule;
        detecting in the first node an inter-node communication message is available for
                transmission; and
        inserting said message within one of said data packets.

10.   The method of claim 9, wherein said inserting is responsive to determining the message does not exceed a predetermined size.

11.   The method of claim 10, wherein in response to detecting the message exceeds said size, the method further comprises:

partitioning the message into a first plurality of blocks, each of said blocks being less than or equal to said size;

encoding the first plurality of blocks into a second plurality of blocks, said second plurality being greater than said first plurality; and

inserting each of the encoded blocks within a different one of said packets.

12. The method of claim 11, further comprising generating pseudo-header information corresponding to said message and conveying the pseudo-header information to said second node within said packets.

13. The method of claim 12, wherein said pseudo-header information is selected from the group consisting of: a unique message identifier corresponding to said message, a message type indication, a message length indication, and a sequence number corresponding to each block.

14. The method of claim 11, further comprising reconstructing the message subsequent to receiving any combination of a number of the encoded blocks, said number being at least equal to the first plurality.

15. The method of claim 14, wherein the link comprises a heartbeat network, and wherein the system further comprises a data network interconnect coupled to the first node and the second node.

16. The method of claim 11, wherein said encoding is pursuant to an erasure code algorithm.

17. A node configured for inter-node communication, said node comprising:

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a first component configured to convey a plurality of data packets of a first type

via a communication link, each of said packets being conveyed according

to a predetermined schedule; and

a second component configured to:

5   detect an inter-node communication message is available for transmission;

and

convey said message to said first component for insertion in one of said

data packets.

10   18.   The node of claim 17, wherein the second component is configured to convey said

message for insertion responsive to determining the message does not exceed a

predetermined size.

19.   The node of claim 18, wherein in response to detecting the message exceeds said

15   size, the second component is configured to:

partition the message into a first plurality of blocks, each of said blocks being less

than or equal to said size;

encode the first plurality of blocks into a second plurality of blocks, said second

plurality being greater than said first plurality; and

20   convey each of said encoded blocks to said first component for insertion within a

different one of said packets.

20.   The computing system of claim 19, wherein the second component is further

configured to generate pseudo-header information corresponding to said message, said

25   pseudo-header information being selected from the group consisting of: a unique message

identifier corresponding to said message, a message type indication, a message length

indication, and a sequence number corresponding to each block.

21.   The node of claim 19, wherein the second component is configured to encode the first plurality of blocks pursuant to an erasure code algorithm.

22.   A computer accessible medium comprising program instruction, said instructions being executable to:

      convey a plurality of data packets of a first type from a first node to a second node via a communication link, each of said packets being conveyed according to a predetermined schedule;

      detect in the first node an inter-node communication message is available for transmission; and

      insert said message within one of said data packets.

23.   The computer accessible medium of claim 22, wherein the program instructions are executable to insert said message responsive to determining the message does not exceed a predetermined size.

24.   The computer accessible medium of claim 23, wherein in response to detecting the message exceeds said size, the program instructions are executable to:

      partition the message into a first plurality of blocks, each of said blocks being less than or equal to said size;

      encode the first plurality of blocks into a second plurality of blocks, said second plurality being greater than said first plurality; and

      insert each of the encoded blocks within a different one of said packets.

25.   The computer accessible medium of claim 24, wherein said program instructions are further executable to generate pseudo-header information corresponding to said message and convey the pseudo-header information to said second node within said packets, said pseudo-header information being selected from the group consisting of: a

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unique message identifier corresponding to said message, a message type indication, a message length indication, and a sequence number corresponding to each block.

26. The computer accessible medium of claim 24, wherein the program instructions are further executable to enable the second node to reconstruct the message subsequent to receiving any combination of a number of the encoded blocks, said number being at least equal to the first plurality.

27. The computer accessible medium of claim 26, wherein said program instructions are executable to encode said blocks pursuant to an erasure code algorithm.